



**(Use as many sheets as necessary)**

Sheet	I	of	1
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**Complete if Known**

Application Number	10/795,944
Filing Date	March 8, 2004
First Named Inventor	Jeffrey Held, et al.
Art Unit	1724
Examiner Name	P. Hruskoci
Attorney Docket Number	

[illegible]

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	P <sup>2</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
PAW		France 2,327,965	6/17/1977	ITT Industries	1-5	
PAW		JP 1,210,100	8/23/1989	Yoshio	1-5	
PAW		JP 1,307,500	12/12/1989	Ishigaki	1-5	
PAW		DE 4,101,076	8/8/1991	Doevenspeck	1-5	

Examiner Signature	P.A. HRUSKOCI	Date Considered	12/13/04
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Substitute for form 1449A/B/PTO			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)			Application Number	10/795,944	
			Filing Date	March 8, 2004	
			First Named Inventor	Jeffrey Held	
			Art Unit	N/A	
			Examiner Name	Not Yet Assigned	
Sheet	1	of	2	Attorney Docket Number	30811/40225

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
PA		980,483	01/1911	Welcome	
		3,280,982	10/1986	Barto	
		3,397,140	08/1988	Dea	
		3,670,891	08/1972	Allen	
		3,689,806	10/1972	Gallo	
		3,913,500	10/1975	Paccione et al.	
		3,962,069	08/1976	Inoue et al.	
		4,013,552	03/1977	Kreuter	
		4,043,047	08/1977	Galliker	
		4,101,400	07/1978	Pepping	
		4,193,208	03/1980	Maffet	
		4,308,878	12/1981	Wurtz	
		4,367,132	01/1983	Bell et al.	
		4,561,853	12/1985	Muralidhara et al.	
		4,608,179	08/1986	Deal	
		4,620,493	11/1986	Carlson	
		4,655,832	04/1987	Roslonski	
		4,671,874	08/1987	Fremont et al.	
		4,747,920	05/1988	Muralidhara et al.	
		4,755,305	07/1988	Fremont et al.	
		4,881,498	08/1989	Diaz	
		4,971,705	11/1990	Roslonski	
		5,028,484	06/1991	Juvan	
		5,034,111	07/1991	Kondo et al.	
		5,037,560	08/1991	Gayman	
		5,049,248	09/1991	Muralidhara et al.	
		5,143,626	8/1982	Nugent	
		5,230,809	07/1993	Roslonski	
		5,695,650	12/1997	Held	
		5,848,425	12/1998	Whiteman	
		5,893,979	04/1999	Held	
		6,030,538	02/2000	Held	
		6,395,176	05/2002	Held et al.	
		6,491,820	12/2002	Held et al.	
PA		6,540,919	04/2003	Held et al.	

Examiner Signature	P.A. HRUSKOCI	Date Considered	9/28/04
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PTO/SB/02a/b (08-03)

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Substitute for form 1445A/B, PTO			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)			Application Number	10/795,944	
			Filing Date	March 8, 2004	
			First Named Inventor	Jeffrey Held	
			Art Unit	N/A	
			Examiner Name	Not Yet Assigned	
Sheet	2	of	2	Attorney Docket Number	30811/40225

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†
		Country Code <sup>2</sup>	Number/Kind Code <sup>3</sup> (if known)				
PAU		JP	53-91468	11/1978			
		JP	60-25597	08/1985			
		WO	99/24372	05-20-1999	Held, J.		
		WO	02/04358	01-17-2001	Held et al.		

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NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issues number(s), publisher, city and/or country where published.				†
PAU	C1	Gaudy, et al., "The Microbiology of Waste Disposal", <i>The Microbiology of Waste Waters</i> , W.B. Saunders & Comp., chapter 36, 1871.				
	C2	Curtiss, "Bacterial Cell Wall," <i>Microbiology</i> , W.W. Norton & Co., 1976.				
	C3	Morrissey et al., <i>Sterilization Methods Used in Microbiology, Sterilization Technology</i> , 1993.				
	C4	Gupta, R.P., "Pulsed High Electric Field Sterilization".				
	C5	"Controlling Fluid Flow with Porous Metals", <i>Machine Design</i> , January 8, 1987.				
	C6	Newmet-Thermet Krebsco Company, "Porous Metal Products" products brochure.				
	C7	Graham Mfg. Co., "Heli-flow Heat Exchanger".				
	C8	"Merlen OPTT Series Pump/Stuffer" product brochure.				
	C9	Chauhan, S., "Feasibility of Biosludge Dewatering Using Pulsed Electric Fields," <i>Battelle Final Report</i> , 1-24 (1998).				

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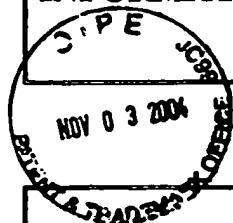
<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	P.A. HRUSKOCI	Date Considered	9/28/04
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Form PTO-1449 (Modified)

Atty. Docket No.  
30811/40225Serial No.  
10/795,944

## INFORMATION DISCLOSURE STATEMENT

Applicant(s)  
Held et al.Filing Date  
March 8, 2004Art Unit  
1724

## U.S. PATENT DOCUMENTS

Examiner Initials	Document Number	Issue or Publication Date	Name	Class	Subclass	Filing Date (If Appropriate)
PAA	3,265,605	8/9/66	Doevenspeck	204	165	
	4,592,291	6/3/86	Sullivan III	110	346	
	4,631,133	12/23/86	Axelrod	210	739	
	4,917,785	4/17/90	Juvan	204	164	
	4,957,606	9/18/90	Juvan	204	164	
	5,037,524	8/6/91	Juvan	204	660	
	5,091,079	2/25/92	Gayman	210	175	
	5,464,513	11/7/95	Goriachev	204	164	
	5,507,927	4/16/96	Emery	204	157.43	
	5,522,553	6/4/96	LeClair et al.	241	21	
	5,630,915	5/20/97	Greene et al.	204	164	
	5,801,489	9/1/98	Chism Jr., et al.	315	111.21	
PAA	6,402,065	6/11/02	Higgins	241	21	

## FOREIGN PATENT DOCUMENTS

Examiner Initials	Document Number	Publication Date	Country	Translation	
				Yes	No
PAA	DE 4 101 076	8/8/91	Germany	Abst.	
PAA	JP 1-210100	8/23/89	Japan	X	
PAA	JP 1-307500	12/12/89	Japan	Abst.	
PAA	WO98/58740	12/30/98	WIPO	N/A	

EXAMINER:

P.A. HEUSKOCI

DATE CONSIDERED:

12/7/04

Form PTO-1449 (Modified)  <b>INFORMATION DISCLOSURE STATEMENT</b>	Atty. Docket No. 30811/40225	Serial No. 10/795,944
	Applicant(s) Held et al.	
	Filing Date March 8, 2004	Art Unit 1724

OTHER DOCUMENTS	
<i>PAHA</i>	International Search Report (counterpart to priority application).
<i>PAHA</i>	Bradley et al., <i>Bipolar Electrodeposition on Nanotubes</i> (USA).
<i>PAHA</i>	Castro et al., <i>Microbial Inactivation of Foods by Pulsed Electric Fields</i> , J. Food Proc. Pres. 17:47-73 (1993) (USA).
<i>PAHA</i>	<i>Consideration of Sludge Dewatering Methods</i> in The Microbiology of Waste Waters (W.B. Sauders & Co.) pp.6-8, 17 (1971) (USA).
<i>PAHA</i>	Dossenbach et al., <i>Pulse Current Electrodeposition of Palladium Silver Alloys</i> in AESF (American Electroplaters and Surface Finishers Society) Third International Pulse Plating Symposium H1-H3 (1986) (USA).
<i>PAHA</i>	El-Shazly et al., <i>High-Speed Metal Deposition Using Interrupted Current Techniques</i> in AESF (American Electroplaters and Surface Finishers Society) Third International Pulse Plating Symposium C1-C7, C9-C11 (1986) (USA).
<i>PAHA</i>	<i>Method Improves Sludge Digestion</i> , Waste Treatment Tech. News v.12 i8 (1996) (USA).
<i>PAHA</i>	Gutierrez, <i>Recent Advances in Pulse Plating Power Supply Technology &amp; Plating Capability</i> , AESF 5th Pulse Plating Symposium 1-23 (June 2000) (USA).
<i>PAHA</i>	Kady International materials – 4 pages (circa 1999) (USA).
<i>PAHA</i>	Kady Internation materials – 2 pages (circa 1999) (USA).
<i>PAHA</i>	Koelzer, <i>Back to the Basics: Pulse Math</i> , Plating & Surface Finishing (Dec. 2000) (USA).
<i>PAHA</i>	Mertens et al., <i>Developments of Nonthermal Processes for Food Preservation</i> , Food Tech. 46(5):124, 126-133 (May 1992) (USA).
<i>PAHA</i>	Milad et al., <i>PPR Plating for HDI</i> , PC Fab, 40, 42, 44, 46 (2000) (USA).
<i>PAHA</i>	Peshkovsky et al., <i>Dipolar Interactions in Molecules Aligned by Strong AC Electric Fields</i> , J. Magnetic Resonance, 147:104-109 (2000) (USA).

EXAMINER: <i>P.A. HRUSKOCI</i>	DATE CONSIDERED: <i>12/7/04</i>
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Form PTO-1449 (Modified)  <b>INFORMATION DISCLOSURE STATEMENT</b>	Atty. Docket No. 30811/40225	Serial No. 10/795,944
	Applicant(s) Held et al.	
	Filing Date March 8, 2004	Art Unit 1724

PAA	Puippe, <i>Influence of Charge and Discharge of Electrical Double Layer in Pulse Plating in Theory and Practice of Pulse Plating</i> (Americal Electroplaters and Surface Finishers Society), ch. 4, pp.41-43 (1986) (USA).
PAA	Puippe, <i>Qualitative Approach to Pulse Plating in Theory and Practice of Pulse Plating</i> (Americal Electroplaters and Surface Finishers Society), ch. 1, pp.1-3 (1986) (USA).
PAA	U.S. Food and Drug Administration, <i>Kinetics of Microbial Inactivation for Alternative Food Processing Technologies – Pulsed Electric Fields</i> (June 2000) (USA).
PAA	Wadehra et al, <i>Reduced Wasting from Activated Sludge Processes Using a Mechanical Cell Lysis Technology</i> in WEFTEC 1999, (1999) (USA).
PAA	Zhang, Q. H., Monsalve-Gonzalez, A., Barbosa-Cánovas, G. V. and Swanson, B. G., <i>Inactivation of E. coli and S. cerevisiae by pulsed electric fields under controlled temperature conditions</i> , Transactions of the ASAE. 37(2):581-587 (1994) (USA).
PAA	Zhang, Q. H., Chang, F.-J. and Barbosa-Cánovas, G. V., <i>Inactivation of microorganisms in a semisolid model food using high voltage pulsed electric fields</i> , Lebensm Wiss Technol. 27(6):538-543 (1994) (believed to be Germany).
PAA	Zhang, Q. H., Qin, B.-L., Barbosa-Cánovas, G. V. and Swanson, B. G., <i>Inactivation of E. coli for food pasteurization by high-strength pulsed electric fields</i> , J. Food Process Preserv. 19(2):103-118 (1995) (USA).
PAA	Zhang, Q. H., Barbosa-Cánovas, G. V. and Swanson, B. G., <i>Engineering aspects of pulsed electric field pasteurization</i> , J. Food Eng. 25(2):261-281 (1995) (Great Britain).
PAA	Zhang, Q. H., Qiu, X. and Sharma, S. K., <i>Recent development in pulsed electric field processing</i> . National Food Processors Association - New Technologies Yearbook. 31-46 (1997) (believed to be USA).

EXAMINER: P.A. HEUSKOCI	DATE CONSIDERED: 12/7/04
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SHEET 1 of 1

Form PTO-1449 (Modified)	Atty. Docket No.	Serial No.
	30811/40225	10/795,944
	Applicant(s)	
	Held et al.	
<b>INFORMATION DISCLOSURE STATEMENT</b>	Filing Date	Art Unit
	March 8, 2004	1724

U.S. PATENT DOCUMENTS						
Examiner Initials	Document Number	Issue or Publication Date	Name	Class	Subclass	Filing Date (If Appropriate)
PAA	5,690,978	11/25/1997	Yin et al.			9/30/1996

FOREIGN PATENT DOCUMENTS					
Examiner Initials	Document Number	Publication Date	Country	Translation	
				Yes	No

OTHER DOCUMENTS	
PAA	El-Shazly et al., <i>High-Speed Metal Deposition Using Interrupted Current Techniques</i> in AESF (American Electroplaters and Surface Finishers Society) Third International Pulse Plating Symposium C8 (1986) (USA).
PAA	Dentel et al., <i>Overview of Electrical Arc Conditioning of Biosolids</i> in Water Environment Research Foundation: Workshop #116 Recent Advances in Biosolids Research: Conditioning, Dewatering, and Beneficial Use 86-98 (1999) (USA)

EXAMINER: P.A. HRUSKOCI	DATE CONSIDERED: 12/7/04
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